

Brand i en fabrik för produktion av brandbekämpningsmedel.

820908 MARS 1800_45

Ett oavsiktligt spill av metanol i en elektrisk kabelbana orsakade en kortslutning som antände metanolen. En omfattande brand spred sig på området. Operatörerna kunde sätta sig i säkerhet och räddningstjänsten tillkallades omedelbart.

Inblandade ämnen och mängder

	CAS Nr.	Mängd
metanol	67-56-1	okänt
brom	7726-95-6	okänt

Skador:

Människor: Inga.
Materiella: Produktionsanläggningen och närliggande byggnader skadades svårt.
Miljö/ekologi: Inga effekter rapporterade.
Infrastruktur: Allmänheten varnades och evakuering förbereddes.

Erfarenheter redovisade (Ja/Nej): Ja

Mycket kortfattat anges förebyggande åtgärder.

Report Profile

Identification of Report:

country: FA ident key: 1800_045_01

reported under Seveso I directive as major accident reports: SHORT+FULL

Date of Major Occurrence: Time of Major Occurrence

start: 1982-09-08 start:

finish: finish:

Establishment:

name:

address:

industry: 2001 general chemicals manufacture

Organic Chemical (Process Plant for Fire Fighting Agents)

Seveso II status: not applicable: Yes art. 6 (notification): No

art. 7 (MAPP): No

art. 9 (safety report): No

Date of Report:

short: full:

Authority Reporting:

name:

address:

Authority Contact:

rep_cont_name:

rep_cont_phone:

rep_cont_fax:

Additional Comments:

a) - not applicable -

b) - not applicable -

c) - not applicable -

d) - not applicable -

e) - not applicable -

Short Report

country: FA ident key: 1800_045_01

Accident Types:

release: No explosion: No

water contamination: No other: No

fire: Yes

description:

ACCIDENT CASE HISTORY DESCRIPTION:... see Appendix Short Report / description of accident types

Substance(s) Directly Involved:

toxic: Yes explosive: Yes

ecotoxic: No other: No

flammable: Yes

description:

- Methanol (C.A.S. CODE: 67-56-1, E.E.C. CODE: 603-001-00-X): amount involved = not known.... see Appendix

Short Report / description of substances involved

Immediate Sources of Accident:

storage: No transfer: No

process: Yes other: Yes

description:

The accident occurred during normal operation in an electric system room of an organic chemical industry for the production of fire fighting agents.

Suspected Causes:

plant or equipment: No environmental: No

human: Yes other: No

description:

INITIATING EVENT AND CONSEQUENCES:... see Appendix Short Report / description of suspected causes

Immediate Effects:

material loss: Yes

human deaths: No

human injuries: No community disruption: Yes

other: No

ecological harm: No

national heritage loss: No

description:

MATERIAL LOSS:... see Appendix Short Report / description of immediate effects

Emergency Measures taken:

on-site systems: Yes **decontamination:** No

external services: Yes **restoration:** No

sheltering: Yes **other:** No

evacuation: No

description:

INTERNAL TO THE ESTABLISHMENT:... see Appendix Short Report / description of emergency measures taken

Immediate Lessons Learned:

prevention: No **other:** No

mitigation: Yes

description:

MEASURES TO MITIGATE THE EFFECTS OF THE ACCIDENT:

After the accident, a better spatial separation of the bromine vessels (about 30 tonnes of capacity) was suggested.

A Occurrence Full Report

country: FA **ident key:** 1800_045_01

1 Type of Accident

remarks: An unintentional spillage of methanol (code 1102) into an electric cable way caused a short-circuit which ignited the flammable liquid resulting in a large fire (code 1202).

2 Dangerous Substances

remarks: No data are available about the amount of methanol and bromine involved in the accident.

3 Source of Accident

illustration: - not applicable -

remarks: The accident started during normal operation in an electric system room of an organic chemical industry for the production of fire fighting agents (code 2001).

4 Meteorological Conditions

precipitation none: fog: rain: hail: snow:

No No No No No

wind speed (m/s):

direction (from):

stability (Pasquill):

ambient temperature (∞C):

remarks: - not applicable -

5 Causes of Major Occurrence

main causes

technical / physical - not applicable -

- not applicable -

- not applicable -

- not applicable -

- not applicable -

human / organizational 5401 person: operator error

- not applicable -

- not applicable -

- not applicable -

- not applicable -

remarks: The methanol spillage was caused by a human error during operations (code 5401).

6 Discussion about the Occurrence

- not applicable -

Type of Accident country: FA ident key: 1800_045_01

event:

major occurrence 1202 fire: pool fire (burning pool of liquid, contained or uncontained)

initiating event 1102 release: fluid release to ground

associated event - not applicable -

Dangerous substances

country: FA ident key: 1800_045_01

a) total establishment inventory

CAS number: 67-56-1 identity: Methanol

name from Seveso I Directive: - not applicable -

name from Seveso II Directive: - not applicable -

category from Seveso II: - not applicable -

other hazards (1): - not applicable -

other hazards (2): - not applicable -

maximum quantity (tonnes): -1

use of substance as: STARTING MATERIAL

b) substance belongs to relevant inventory directly involved: Yes

actual quantity: -1 potential quantity: -1

c) substance belongs to relevant inventory indirectly involved: No

actual quantity: -1 indir_pot_quant: -1

a) total establishment inventory

CAS number: 7726-05-6 identity: Bromine

name from Seveso I Directive: - not applicable -

name from Seveso II Directive: - not applicable -

category from Seveso II: - not applicable -

other hazards (1): - not applicable -

other hazards (2): - not applicable -

maximum quantity (tonnes): -1

use of substance as: STARTING MATERIAL

b) substance belongs to relevant inventory directly involved: Yes

actual quantity: -1 potential quantity: -1

c) substance belongs to relevant inventory indirectly involved: No

actual quantity: -1 indir_pot_quant: -1

Source of Accident - Situation country: FA ident key: 1800_045_01

situation

industry

initiating event 2001 general chemicals manufacture

associated event - not applicable -

activity/unit

major occurrence - not applicable -

initiating event - not applicable -

associated event - not applicable -

component

major occurrence 4999 other

initiating event - not applicable -

associated event - not applicable -

B Consequences Full Report

country: FA ident key: 1800_045_01

1 Area concerned

affected

extent of effects installation: Yes

establishment: Yes

off-site; local: No

off-site; regional: No

off-site; transboundary: No

illustration of effects - not applicable -

remarks Even if the population external to the establishment was alerted and preparation... see Appendix

Full Report B / area concerned - remarks

2 People

establishment popul. emergency personnel off-site population

total at risk

immediate fatalities

subsequent fatalities

hospitalizing injuries

other serious injuries

health monitoring

remarks No people were injured during the accident because operators were able to leave ... see Appendix

Full Report B / people

3 Ecological Harm

pollution/contamination/damage of:

- **residential area (covered by toxic cloud)** Suspected
- **common wild flora/fauna (death or elimination)** Suspected
- **rare or protected flora/fauna (death or elimination)** Suspected
- **water catchment areas and supplies for consumption or recreation** Suspected
- **land (with known potential for long term ecological harm or preventing human access or activities)** Suspected
- **marine or fresh water habitat** Suspected
- **areas of high conservation value or given special protection** Suspected

remarks In the Original Report there is no evidence of significant ecological harms.... see Appendix

Full Report B / ecological harm

4 National Heritage Loss

effects on:

- **historical sites** not applicable - **historic monuments** not applicable
- **historic buildings** not applicable - **art treasures** not applicable

remarks No data available.

5 Material Loss

establishment losses off site losses

costs (direct costs to operator) (social costs)

in ECU ECU

material losses

response, clean up, restoration

remarks The production plant and the nearby buildings were seriously damaged but no data... see Appendix

Full Report B / material loss

6 Disruption of Community Life

establishment/plant evacuated disabled/unoccupiable destroyed

- **nearby residences/hotels** No No No
- **nearby factories/offices/small shops** No No No

- **schools, hospitals, institutions** No No No

- **other places of public assembly** No No No

interruption of utilities etc. no / yes duration

- **gas** No

- **electricity** No

- **water** No

- **sewage treatment works** No

- **telecommunications** No

- **main roads** No

- **railways** No

- **waterways** No

- **air transport** No

significant public concern none local level national level

- **off site populations** No Yes No

- **media interest** No No No

- **political interest** No No No

remarks The population external to the establishment was alerted and preparations for an... see Appendix

7 Discussion of Consequences

C Response Full Report

country: FA **ident key:** 1800_045_01

1 Emergency Measures

taken - on site - not applicable - - not applicable -

- not applicable - - not applicable -

- not applicable - - not applicable -

- **off site** - not applicable - - not applicable -

- not applicable - - not applicable -

- not applicable - - not applicable -

still - on site - not applicable - - not applicable -

required

- not applicable - - not applicable -

- not applicable - - not applicable -

- **off site** - not applicable - - not applicable -

- not applicable - - not applicable -

- not applicable - - not applicable -

continuing contamination or danger

-**on site** not applicable

-**off site** not applicable

remarks - not applicable -

2 Seveso II Duties

pre-accident evaluation

Article item not due yet not done done/submitted evaluated

6 notification No No No No

7 policy (MAPP) No No No No

9 safety report No No No No

9, 10, 11 update No No No No

11 internal plan No No No No

11 external plan No No No No

13 informing public No No No No

9, 12 siting policy No No No No

post-accident evaluation

Seveso II duty was actual were actual compared with actual

contingency consequences consequences, the

addressed? addressed? predicted extent was?

Article item

7 policy (MAPP) not applicable not applicable not applicable

9 current safety report not applicable not applicable not applicable

11 internal plan not applicable not applicable not applicable

11 external plan not applicable not applicable not applicable

13 informing public not applicable not applicable not applicable

9, 12 siting policy not applicable not applicable not applicable

evaluation of safety organisation

organisational element element existed did element relate to actual circumstances of

yes / no no / partly / yes adequate?

- written policy objectives No

- specified management No

structure

- specified responsibilities No

- specified working procedures No

- specified procedures for No

assessment/auditing of

management system

- specified procedures for No

review and update of

management policy

- specified general training No

procedures

- specified emergency No

training procedures

evaluation of ecological impact control

organisational element element existed did element relate to actual circumstances of

yes / no no / partly / yes adequate?

- ecological status review No

before incident

- potential ecological No

consequences assessment

- ecological impact review No

after incident

- ecological restoration No

procedures

- subsequent review of No

restoration success

remarks - not applicable -

3 Official Action Taken

legal action

- not applicable -

other official action

- not applicable -

4 Lessons Learned

measures to prevent recurrence

- not applicable -

measures to mitigate consequences:

After the accident, a better s... see Appendix Full Report C / lesson learned - mitigate

useful references:

- not applicable -

5 Discussion about Response

- not applicable -

Appendices for the FA / 1800_045_01 report

Appendix Short Report / description of accident types:

ACCIDENT CASE HISTORY DESCRIPTION:

An unintentional spillage of methanol into an electric cable way caused a short-circuit which ignited the flammable liquid resulting in a large fire. The operators were able to leave the site of the fire. The population external to the establishment was alerted and preparations for an extended evacuation were initiated.

Appendix Short Report / description of substances involved:

- Methanol (C.A.S. CODE: 67-56-1, E.E.C. CODE: 603-001-00-X): amount involved = not known.

- Bromine (C.A.S. CODE: 7726-95-6, E.E.C. CODE: 035-001-00-5): amount involved = not known.

Appendix Short Report / description of suspected causes:

INITIATING EVENT AND CONSEQUENCES:

Unintentional spillage of methanol caused a short-circuit which ignited the flammable liquids resulting in a large fire.

CAUSES:

The methanol spillage was caused by a human error during operations.

Appendix Short Report / description of immediate effects:

MATERIAL LOSS:

The production plant and the nearby buildings were seriously damaged but no data are available about the cost of the material losses.

COMMUNITY DISRUPTION:

The population external to the establishment was alerted and preparations for an extended evacuation were initiated.

Appendix Short Report / description of emergency measures taken:

INTERNAL TO THE ESTABLISHMENT:

Operators were able to leave the site of the fire. The Emergency alarm was sounded and the fire brigade intervened.

EXTERNAL TO THE ESTABLISHMENT:

The population external to the establishment was alerted and preparations for an extended evacuation were initiated.

Appendix Full Report B / area concerned - remarks:

Even if the population external to the establishment was alerted and preparations for an extended evacuation were initiated, in the Original Report there is no evidence of significant effects outside the establishment.

Appendix Full Report B / people:

No people were injured during the accident because operators were able to leave the site of the fire.

Appendix Full Report B / ecological harm:

In the Original Report there is no evidence of significant ecological harms.

Appendix Full Report B / material loss:

The production plant and the nearby buildings were seriously damaged but no data are available about the cost of the material losses.

Appendix Full Report B / disruption of community life:

The population external to the establishment was alerted and preparations for an extended evacuation were initiated.

Appendix Full Report C / lesson learned - mitigate:

After the accident, a better spatial separation of the bromine vessels (about 30 tonnes of capacity) was suggested.